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(12) **United States Patent**
Song et al.(10) **Patent No.:** US 6,288,693 B1
(45) **Date of Patent:** *Sep. 11, 2001(54) **PLASMA DISPLAY PANEL DRIVING METHOD**(75) **Inventors:** Young-Bok Song; Sang Jin Yun;
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Lee, Daegu-si, all of (KR)(73) **Assignee:** LG Electronics Inc., Seoul (KR)(*) **Notice:** This patent issued on a continued prosecution application filed under 37 CFR 1.53(d), and is subject to the twenty year patent term provisions of 35 U.S.C. 154(a)(2).

Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) **Appl. No.:** 08/980,965(22) **Filed:** Dec. 1, 1997(30) **Foreign Application Priority Data**Nov. 30, 1996 (KR) 96 60307
Jul. 4, 1997 (KR) 97 31187(51) **Int. Cl.**⁷ G09G 3/28
(52) **U.S. Cl.** 345/68; 345/209; 345/60(58) **Field of Search** 345/204, 60, 61,
345/62, 63, 147, 103, 89, 68, 69, 209; 315/169.4(56) **References Cited**

U.S. PATENT DOCUMENTS

5,029,257 * 7/1991 Kim 315/169.4
5,317,334 * 5/1994 Sano 345/146
5,410,219 * 4/1995 Takei et al. 315/169.4
5,475,448 * 12/1995 Saegusa 348/797
5,835,072 * 11/1998 Kanazawa 345/60
5,854,540 * 12/1998 Matsumoto et al. 315/169.1

* cited by examiner

Primary Examiner—Steven Saras*Assistant Examiner*—Fritz Alphonse(74) *Attorney, Agent, or Firm*—Fleshner & Kim, LLP(57) **ABSTRACT**

Provided is a method of driving a plasma display panel, which is a sub-field driving method for the plasma display panel with scan and addressing drive signals, including the steps of: a) dividing scan lines of a field into at least two areas, and scanning the areas; b) displaying a sub-field by applying different address pulses to the respective areas during the scanning; and c) repeating the preceding steps to drive the sub-field, thereby displaying the field.

7 Claims, 21 Drawing Sheets

